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An annotated list of the 29 species is presented, with notes on relative abundance, period of flight, and food.

Five species, *crassissima, lanceolata, rubiginosa, futilis* and *rugosa,* occur in sufficient numbers to be a serious menace to crops. Five other species occurred in moderate numbers, indicating that they may at times become injurious. These are *implicata, bipartita, hirticula, vehemens,* and *glabricula.*

Four species, *longitarsa, crenulata, fusca* and *congrua,* are not common to this locality; and nine species, *prœtermissa, inversa, fervida, corrosa, ilicis, submucida, inepta, affabilis* and *tristis,* are rare.

Six additional species are represented in the collection of the Agricultural College, or reported in literature from this locality. These are *ephilida, balia, parvidens, forsteri, fraterna* and *profunda.*

Two of the species represented in the writers' collection, namely, *prœtermissa* and *inepta,* have not been previously reported from Kansas.

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Notes on Larval Trematodes from the Laramie Plains.

EARL C. O'ROKE.

During the past two summers the writer has been studying the fauna of the Laramie plains in southern Wyoming, in the hope that data might be obtained that would be of use in solving the problems involved in the life histories of some of the trematode worms.

The Laramie plains are peculiarly situated geographically, in that there are mountain barriers to the east, south and west. The only stream that drains the region is the Laramie river, which flows in a northeasterly direction and joins the Platte. Rapids in this stream where it goes through the mountains constitute an effective barrier to many forms of aquatic life. Ponds are numerous in the vicinity of Laramie, almost all of them being alkaline and having their source of water supply in seepage from irrigation ditches. These ponds have an abundant growth of algæ and other forms of plant life and harbor myriads of small crustaceans belonging to the Entomostraca, as well as numerous aquatic insects. The only vertebrates found in the ponds are the common leopard frog, *Rana pipiens,* and the spotted salamander, *Ambystoma tigrinum.* Two species of snails, *Glba palustrus* and *Physa integra,* are found in enormous numbers. As regards the mammals inhabiting the plains, ground squirrels, field mice, prairie dogs, jack rabbits, badgers and coyotes are found. There are muskrats in the river, but these have not been seen in and about the ponds. Of the mammals mentioned above, only the first two forms have been seen in the immediate vicinity of the ponds that have been studied most, namely, the ones near the farm site on the university stock farm at Laramie.

It is true that migratory birds could gain access to these ponds, but only three species have ever been observed near the ponds. These are the yellow-headed blackbird, the cliff swallow and Wilson's snipe.

The ponds are for the most part shallow and are frozen solid for from four to six months of the year.

Examination of the two species of snails previously mentioned shows them to be heavily infected with larval trematodes of at least three different species, none of which have as yet been fully identified. Notwithstanding this heavy infection of the snails, no adult trematodes have as yet been found in any of the possible vertebrate hosts.

Some experimental work has been undertaken, in which young frogs brought from another locality were liberated in cages in a pond with infected snails. The results were negative. Likewise, salamanders confined in an aquarium with infected snails gave no evidence of trematode infection.

Studies have been made on the seasonal appearance of the cercariæ and interesting records obtained. The time during which cercariæ may be found emerging from snails is much shorter than in Kansas, where the writer made extensive studies of these parasites in 1915 and 1916. Further studies are planned for the summer of 1919.

Plant Diseases Heretofore Unreported in Kansas.

L. E. Melchers.

REPORTED IN 1914.

*_Heterodera radicicola,_ root knot on Canada thistle (*Circium arvense*). Manhattan.

Blossom-end-rot, tomato; nonparasitic. All over the state.

Septoria sp., sweet-potato leaf spot. Manhattan, Wamego.

Heterodera radicicola, root knot on cucumber. Hutchinson.

Heterodera radicicola, celery root knot.

Colletotrichum trifolii Bain, stem disease of alfalfa. Manhattan.

Fungous root trouble of wheat. Undetermined. Manhattan, Moline, Speed, Stockton.

Coniosporium gecevii, corn-cob rot. Manhattan.

Fusarium batatis (*hyperoxysporum*), wilt of sweet potato. Wamego, Manhattan.

Fusarium vasinfectum var. *tracheiphilis,* cowpea wilt.

Nummularia discreta Tul. Heretofore unreported in state, but known. Apple.

*Black chaff and stem disease of wheat. Bacterial.